Thousands can be Saved From Going Blind

By

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BLINDNESS is a double tragedy. It deprives its victim of one of the most precious gifts of nature which make life worthwhile and it casts an unnecessary burden on the community which must support its unproductive blind population.

India is estimated to have about 2 million blind—which is about one-fifth of the world’s blind population. The fact that 60 to 80% of this blindness is preventable makes the tragedy even more poignant. But, even though ways to prevent many forms of blindness are known, we cannot hope to achieve cent per cent success in view of our paucity of funds and technical manpower, and the competing calls on our resources. The present standards of living, education, personal hygiene and environmental sanitation, all have a bearing on the problem of blindness and its prevention. It has to be tackled on a long as well as short-term basis.

Causes of blindness in India may be classified as follows: congenital abnormalities (cataract of childhood etc.); hereditary diseases (optic atrophy, retinitis pigmentosa etc.); inflammatory diseases (ophthalmia of various origins); trachoma; smallpox; cataract; glaucoma; venereal diseases; malnutrition; injuries (associated with sports, industries and war or caused by the use of irritants and interference in the eye by coughers and quacks); diabetes; ill effects of faulty posture, glare, poor lighting and badly printed books; and refractive errors. This list, though not comprehensive, gives a fair picture of the causes of blindness in this country, many of which are preventable.

It would be obvious that measures to prevent blindness from many of these causes should include prevention of diseases, such as trachoma and smallpox, which may lead to blindness; treatment of eye diseases, which if not taken up in time, may lead to incurable blindness; correction of eye defects caused by diseases like cataract; introduction of accident prevention programmes in factories and elsewhere; and education of the people in healthful living with particular reference to the care of the eye. Disease goes hand in hand with poverty, ignorance and poor living conditions. Therefore, efforts to raise standards of living, education and environmental sanitation and hygiene and to educate the people about a balanced diet, must go on simultaneously with a blindness prevention programme.

Young Victims

According to the available data, 30% of the blind in India lose their eyesight under the age of 21, in most cases during the first 5 years of life. The main causes are ophthalmia neonatorum, smallpox, poor or unbalanced diet, and trachoma and/or associated conjunctivities, all of which are preventable diseases.

Measures to control these diseases have been initiated by the Government of India, in some cases with the support of international organizations. The efforts are beginning to bear fruit. Cases of ophthalmia neonatorum are getting less and less with the availability of proper midwifery service in rural areas. Smallpox, once the major cause of blindness, is largely under control, and it is hoped that with the extension of the smallpox eradication programme people will be free from this disease and its threat to eyesight.

Trachoma, often in association with conjunctivitis, is responsible for about 60% of preventable blindness in this country. Epidemiological studies carried out by the Trachoma Control Pilot Project of the Indian Council of Medical Research have brought to light valuable knowledge about this disease. Various field trials have also been carried out to use this knowledge in the most economical, practicable and efficacious methods of control. Even as the trials continue a patent fact that has emerged is that the success of any mass programme will depend on the simultaneous rise in the standard of living of the people.

Eye Care in Schools

In order to prevent loss of sight due to ill effects of bad posture, glare, bad lighting and badly printed books, it is essential that schools be made aware of their responsibility in the matter. Negligence in schools cost many young students their eyes. It should be made compulsory for the schools to teach and practise the principles of posture, proper lighting, avoidance of glare, proper distance and angle between the books and the eyes and use of suitable type in text books.
We must admit the unpleasant fact that so far as the health of the child is concerned, appalling conditions exist in a majority of schools, especially the new ones coming up like mushrooms under private managements, which seem to think their duty ends with making some kind of arrangement for book learning. It is in recognition of this fact that the Government of India have set up a School Health Committee. It is a laudable step and the practical achievements of the committee are awaited with interest.

**Blighted Youth**

In the 21-40 year age group, the main causes may be classified, in that order, as trachoma and/or associated conjunctivitis; venereal diseases; injuries and diabetes. This is generally the age when the after-effects of trachoma such as trichiasis, entropions or corneal opacities begin to manifest themselves. The solution is prevention of trachoma in the early years.

The age group is most vulnerable to venereal infections which, left untreated, may lead to loss of sight. The factors to be taken into consideration in a preventive programme are lack of proper sex education, the popular prejudice against open discussion of sex matters, the social stigma attaching to these diseases which makes a patient hide his illness and the lack of effective Government control on prostitution.

**Accidental Injuries**

People working in factories and workshops belong mostly to this age group—the most productive age. Accidental injuries, including those to the eye, are therefore not uncommon in this age group. There are many provisions in our factory safety Acts which are not observed in actual practice. Particularly relevant to the problem of blindness is the provision for workers to use protective goggles where there is possibility of danger to the eye. And yet, many workers, including doctors, are known to have developed premature cataracts while expose to X-rays, ultra-violet rays or high temperature heat-waves.

Strict enforcement of safety rules is the only sure way of avoiding injury to the eye in the course of work.

In recent years diabetes has been observed as one of the causes of blindness. Once the eye develops conditions such as diabetic retinopathy, cure is very difficult. But diabetes itself is preventable, and either early and properly ophthalmic changes can be avoided to a great extent.

**Afflictions of Old Age**

Eye diseases commonly met with in the 21-40 age group are also found among older people. To these may be added cataract and glaucoma. No preventive measures can be suggested against cataract. People must know, however, that cataract is a normal pathological change which occurs with advancing age and the various metabolic changes in the body. It is like greying of the hair. Blindness due to cataract, however, is curable. Surgery of the cataract is very much advanced today and India has contributed substantially to the subject. The percentage of failures in cataract surgery today has been reduced to a negligible minimum.

Glaucoma is responsible for a high percentage of blindness among older people. Glaucoma blindness is unfortunately incurable, but the disease itself is preventable.

"A large number of cases of glaucoma", to quote Sir J. Duggan, "go undiagnosed or are diagnosed as cataract in early stages and allowed to continue till sight is completely lost. An attack of acute glaucoma is sometimes treated as a billious attack by physicians and the ophthalmic surgeon is not consulted. Atropin is often grossly misused by medical advisers, and ignorant people do not hesitate to use atropin drops prescribed for others because this stopped pain in their eyes. The practice of using 'surma' which occasionally contains belladonna for dilating pupils is also responsible for causing glaucoma. The majority of cases admitted to hospitals are too far advanced to respond to treatment."

It may be a long time before this can be done on a mass scale but if every person above 40 is subjected to a routine check-up and early cases detected and controlled, the disease can be prevented. Further research on the causative factors of glaucoma is also essential.

**Quacks and Coughers**

Eye coughers and quacks contribute a good deal to the country's blind population by their pernicious activities. Intensive propaganda against these unqualified persons who pose as eye specialists is very necessary. Many people have lost their eyes because of the irritants used by these persons and their crude efforts to operate on cataract cases. India’s villages and towns abound with these quack healers. With the lack of medical facilities in the country side the poor villager falls an easy prey to these heartless cheats. Corneal opacities, phthisis bulbi, glaucoma due to dislocated lens and iritis are the common features with which the poor villagers present themselves at the district or eye hospital, after they have been dealt with by the quack surgeon.

Until and unless a law is enacted against this quackery and strictly enforced it may be years before the villager learns to shun it. There is also need to place the scientific system of medicine within easy reach of village people. Development of primary health centres and sub-centres is a proper step in this direction.

**Cornea Grafting**

Until now there was no hope for persons gone blind due to corneal opacities caused by an attack of smallpox or corneal injury. The technique of corneal transplantation holds out new hope to these blind. But it has its own limitations. Corneal transplantation depends on donor material i.e. healthy cornea of another person which in our country is very difficult to obtain. The cornea to be grafted should be taken out within 30 to 40 minutes of death, but our age-old customs do not permit inter-

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